

a) at least two recoil buffering cylinders engaged to and to move in unison with said barrel during recoil action of the barrel caused by the firing of the projectile, each said at least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that of said barrel,

b) a piston and piston rod assembly for each of said at least two recoil buffering cylinder,

wherein said piston of each said assembly is slidably engaged within its respective recoil buffering cylinder, and

wherein said piston rod of each said assembly is secured to said support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,

c) a second means of support by which said at least two recoil buffering cylinders are supported from said support platform, said second means of support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least one recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a manner so that no direct contact with said support platform by said barrel will be made, and

wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force, via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least one buffering cylinder allows said second means of support to remain stationary and

unsubjected to the recoiling force in said longitudinal direction.

39. (new) A recoil buffering apparatus as claimed in claim 38 wherein said barrel is to be located between said at least two recoil buffering cylinders.

40. (new) A recoil buffering apparatus as claimed in claim 38 wherein said second means of support includes a cradle member having an aperture there through for each said recoil buffering cylinders, with and through which each said recoil buffering cylinder is slidably engaged at the exterior cylindrical surface of said recoil buffering cylinder to be guided during recoil in the longitudinal direction.

41. (new) A recoil buffering apparatus as claimed in claim 40 wherein said second means of support includes two support arms, each engaged to said cradle and to extend between said cradle and said support platform.

42. (new) A recoil buffering apparatus as claimed in claim 41 wherein said two support arms are when engaged to said support platform, directed from said cradle in a downward and a forward direction (firing direction) and are splayed outwardly from each other to be engaged to said support platform a distance wider apart than where said two support arms are engaged to said cradle.

43. (new) A recoil buffering apparatus as claimed in claim 41 wherein, two further support arms are provided each engaged to said cradle and to extend between said support platform and said cradle, said two further support arms being parallel to said piston rods and said recoil buffering cylinders.

44. (new) A recoil buffering apparatus as claimed in claim 38 wherein said piston rods are to be pivotally secured to said support platform about a vertical pivot axis, said second means of support engaged to said support platform in a manner to allow traversing movement thereof about the vertical pivot axis of said piston rods to allow directional aiming of said barrel.

45. (new) A recoil buffering apparatus as claimed in claim 40 wherein a yoke is provided for engaging each said recoil buffering cylinders to said barrel at or proximate, the forward most (in the direction of firing) end of each said recoil buffering cylinder said cradle slidably engages each said recoil buffering cylinders intermediate of said yoke and second region where each recoil buffering cylinder is engaged to said barrel.

46. (new) A recoil buffering apparatus as claimed in claim 41 wherein said support arms are telescopic support arms adjustable in length, wherein with each said piston rod assembly pivotally engageable to said support platform about a horizontal axis, said telescopic arms are able to vary the elevation of the barrel.

47. (new) An artillery gun assembly comprising

a barrel with a breech assembly, the breech assembly having a firing mechanism for firing a projectile through an open end of the barrel,

a support platform by which said barrel is supported

a recoil buffering assembly comprising

a) at least two recoil buffering cylinders engaged to and to move in unison with said barrel during recoil action of the barrel caused by the firing of the projectile, each said at least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that of said barrel,

b) a piston and piston rod assembly for each of said at least two recoil buffering cylinder,

wherein said piston of each said assembly is slidably engaged within its respective recoil buffering cylinder, and

wherein said piston rod of each said assembly is secured to said support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,

c) a second means of support by which said at least two recoil buffering cylinders are supported from said support platform, said second means of support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least one recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a

manner so that no direct contact with said support platform by said barrel will be made, and

wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least one buffering cylinder allows said second means of support to remain stationary and un subjected to the recoiling force in said longitudinal direction.

48. (new) A recoil buffering apparatus as claimed in claim 47 wherein said barrel is located between said at least two recoil buffering cylinders.

49. (new) A recoil buffering apparatus as claimed in claim 47 wherein said second means of support includes a cradle member having an aperture there through for each said recoil buffering cylinders, with and through which each said recoil buffering cylinder is slidably engaged at the exterior cylindrical surface of said recoil buffering cylinder to be guided during recoil, in the longitudinal direction.

50. (new) A recoil buffering apparatus as claimed in claim 49 wherein said second means of support includes two support arms each engaged to and extending between said cradle and said support platform

51. (new) A recoil buffering apparatus as claimed in claim 50 wherein said two support arms are directed from said cradle in a downward and a forward direction (firing direction) and are splayed outwardly from each other to be engaged to said support platform a distance wider apart than where said two support arms are engaged to said cradle.

52. (new) A recoil buffering apparatus as claimed in claim 50 wherein, two further support arms are provided each engaged to and extending between said support platform and said cradle, said two further support arms being parallel to said piston rods and said recoil buffering cylinders.

53. (new) A recoil buffering apparatus as claimed in claim 38 wherein said piston rods are to be pivotally secured to said support platform about a vertical pivot axis, said second means of support engaged to said support platform in a manner to allow traversing movement thereof about the vertical pivot axis of said piston rods to allow directional aiming of said barrel.

54. (new) A recoil buffering apparatus as claimed in claim 49 wherein said recoil buffering cylinders are engaged to said barrel at or proximate to each distal end of each said recoil buffering cylinder, the forward most (in the direction of firing) end of each said recoil buffering cylinder being engaged via a yoke and wherein said cradle slidably engages each said recoil buffering cylinders intermediate of said yoke wherein each recoil suffering cylinder is engaged to said barrel.

55. (new) A recoil buffering apparatus as claimed in claim 50 wherein said support arms are telescopic support arms adjustable in length, wherein with each said piston rod assembly pivotally engaged to said support platform about a horizontal axis, said telescopic arms are able to vary the elevation of the barrel.

56. (new) An artillery gun for mounting on a support platform, said gun comprising

- a) a barrel with a breech assembly, the breech assembly having a firing mechanism for firing a projectile through an open end of the barrel,
- b) a recoil buffering assembly comprising
 - a. at least two recoil buffering cylinders engaged to and to move in unison with said barrel during recoil action of the barrel caused by the firing of the projectile, each said at least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that of said barrel,
 - b. a piston and piston rod assembly for each of said at least two recoil buffering cylinder, wherein said piston of each said assembly is slidably engaged within its respective recoil buffering cylinder, and wherein said piston rod of each said assembly is for securing to a support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,
 - c. a second means for supporting by which said at least two recoil buffering cylinders from said support platform, said second means of

support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least one recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein, when so secured to said support platform, said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a manner so that no direct contact with said support platform by said barrel will be made, and

wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least one buffering cylinder allows said second means of support to remain stationary and unsubjected to the recoiling force in said longitudinal direction.

57. (new) A recoil buffering apparatus as claimed in claim 56 wherein said barrel is located between said at least two recoil buffering cylinders.

58. (new) A recoil buffering apparatus as claimed in claim 57 wherein said second means of support includes a cradle member having an aperture there through for each said recoil buffering cylinders, with and through which each said recoil buffering cylinder is slidably engaged at the exterior cylindrical surface of said recoil buffering cylinder to be guided during recoil, in the longitudinal direction.

59. (new) A recoil buffering apparatus as claimed in claim 58 wherein said second means of support includes two support arms each engaged to said cradle and to extend between said cradle and said support platform.

60. (new) A recoil buffering apparatus as claimed in claim 59 wherein said two support arms, when engaged to said support platform, are directed from said cradle in a downward and a forward direction (firing direction) and are splayed outwardly from each other to be engaged to said support platform a distance wider apart than where said two support arms are engaged to said cradle.

61. (new) A recoil buffering apparatus as claimed in claim 59 wherein, two further support arms are provided each engaged to said cradle and to extend between said support platform and said cradle, said two further support arms being parallel to said piston rods and said recoil buffering cylinders.

62. (new) A recoil buffering apparatus as claimed in claim 56 wherein said piston rods are to be pivotally secured to said support platform about a vertical pivot axis, said second means of support engaged to said support platform in a manner to allow traversing movement thereof about the vertical pivot axis of said piston rods to allow directional aiming of said barrel.

63. (new) A recoil buffering apparatus as claimed in claim 58 wherein said recoil buffering cylinders are engaged to said barrel at or proximate to each distal end of each said recoil buffering cylinder, the forward most (in the direction of firing) end of each said recoil buffering cylinder being engaged via a yoke and wherein said cradle slidably engages each said recoil buffering cylinders intermediate of said yoke and where each recoil buffering cylinder is engaged to said barrel.

64. (new) A recoil buffering apparatus as claimed in claim 59 wherein said support arms are telescopic support arms adjustable in length, wherein with each said piston rod assembly pivotally engageable to said support platform about a horizontal axis, said telescopic arms are able to vary the elevation of the barrel.
